This question paper contains **3** printed pages]

Roll No. | | | | | | | | | | |

S. No. of Question Paper : **5799**

Unique Paper Code : **2202031202**

Name of the Paper : **Technology of Food Preservation**

Name of the Course : **B.Sc. (Hons.) Food Technology NEP-UGCF**

Semester : **II, Core**

Duration : **3 Hours** Maximum Marks : **90**

(Write your Roll No. on the top immediately on receipt of this question paper.)

Attempt *five* questions.

Attempt *all* parts of the question together.

1. State whether True/False and correct and rewrite the false statements (any *five*) : 5×2=10

   (1) During freezing of foods bound water freezes first followed by free water.

   (2) Milk should always be kept in chill storage which is between 5°C to 7°C.

   (3) 'Salting out' is a term used to describe a defect during chilled storage.

   (4) Thermal processing destroys all pathogenic and most spoilage microorganisms in a hermetically sealed container.

P.T.O.

(5) Aseptic processing is a technique wherein commercially sterilized foods are packaged into previously sterilized containers under sterile conditions to produce shelf-stable products that need refrigeration,

(6) Potatoes should be stored at a temperature of < 10°C in cold storage warehouses for superior eating quality and better shelf life.

2. Differentiate between the following (any *four*) : 4×5=20

(1) Drying *Vs.* Dehydration

(2) Slow freezing *Vs.* Quick freezing

(3) Low acid foods *Vs.* High acid foods

(4) Blanching *Vs.* Boiling

(5) Cold Sterilization *Vs.* Commercial sterilization.

3. Elaborate with the help of a neatly labelled diagram : 2×10=20

(1) Explain the principle of freezing along with the changes that occur during freezing.

(2) Discuss the principle of drying with the help of normal drying curve.

4. Answer briefly (any *four*) : 4×5=20

(*a*) Changes during thawing of food.

(*b*) Factors affecting evaporation of food.

(*c*) Factors affecting rate of drying.

(*d*) Classification of foods based on pH.

(*e*) Advantages of Aseptic Processing.

5. Write briefly (any *two*) :

(*a*) Discuss the conventional preservation technologies with suitable examples. Give their merits and demerits. 10

(*b*) Ionizing radiations can make most food products shelf stable for extended periods. Justify with suitable examples. 10

(*c*) Discuss the historical evolution of food processing. 10